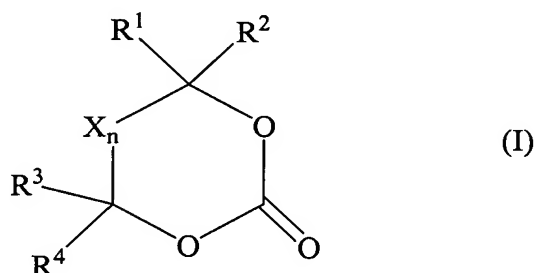


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A process for the catalytic hydroformylation of an olefinically unsaturated compound having from 3 to 24 carbon atoms using an unmodified catalyst comprising rhodium ~~at least one metal of groups 8 to 10 of the Periodic Table of the Elements~~, wherein the hydroformylation is carried out in the presence of a cyclic carbonic ester of the formula I



where

R^1, R^2, R^3, R^4 are identical or different and are each H or a substituted or unsubstituted aliphatic, alicyclic, aromatic, aliphatic-alicyclic, aliphatic-aromatic or alicyclic-aromatic hydrocarbon radical having from 1 to 27 carbon atoms,

n is 0 - 5

X is a divalent substituted or unsubstituted, aliphatic, alicyclic, aromatic, aliphatic-alicyclic or aliphatic-aromatic hydrocarbon radical having from 1 to 27 carbon atoms,

with the proportion of the carbonic ester being at least 1% by weight of the reaction mixture.

Claim 2 (Previously Presented): The process as claimed in claim 1, wherein R^1 , R^2 , R^3 , R^4 and X are substituted by identical or different substituents selected from the group consisting of O, N, NH, N-alkyl, N-dialkyl, fluorine, chlorine, bromine, iodine, -OH, -OR, -CN, -C(O)alkyl and -C(O)O-alkyl.

Claim 3 (Previously Presented): The process as claimed in claim 1, wherein said hydroformylation is carried out in the presence of from 5 to 50% by weight, based on the reaction mixture, of a solvent which is nonpolar compared to the cyclic carbonic ester I and is immiscible with the cyclic carbonic ester I.

Claim 4 (Previously Presented): The process as claimed in claim 1, wherein the reaction product from the hydroformylation is extracted with a nonpolar solvent which is immiscible with said cyclic carbonic ester.

Claim 5 (Previously Presented): The process as claimed in claim 3, wherein substituted or unsubstituted hydrocarbons having from 10 to 50 carbon atoms or olefins having from 3 to 24 carbon atoms are used as nonpolar solvent.

Claim 6 (Previously Presented): The process as claimed in claim 1, wherein said hydroformylation is carried out in the presence of $HRh(CO)_3$ as catalyst.

Claim 7 (Previously Presented): The process as claimed in claim 1, wherein the reaction product mixture from the hydroformylation reaction is separated into a fraction comprising predominantly the catalyst and the cyclic carbonic ester and a fraction comprising predominantly the hydroformylation products.

Claim 8 (Previously Presented): The process as claimed in claim 1, wherein a fraction comprising said catalyst is recirculated to the hydroformylation reaction.

Claim 9 (Previously Presented): The process as claimed in claim 1, wherein the cyclic carbonic ester is ethylene carbonate, propylene carbonate, butylene carbonate or a mixture thereof.

Claim 10 (Previously Presented): The process as claimed in claim 1, wherein the unreacted olefinically unsaturated compound is separated off from the reactor output or from the hydroformylation products and are returned to the same hydroformylation reaction or passed to a second hydroformylation reaction.

Claim 11 (Previously Presented): The process as claimed in claim 1, wherein the olefinically unsaturated compound is a compound which has been obtained as unreacted olefinically unsaturated compound from the reactor output of a first hydroformylation reaction.

Claim 12 (Previously Presented): The process as claimed in claim 11, wherein the olefinically unsaturated compound is a compound which has been obtained as unreacted olefinically unsaturated compound from the reactor output of a first hydroformylation reaction carried out in the presence of a ligand-modified catalyst.

Claim 13 (Previously Presented): The process as claimed in claim 4, wherein substituted or unsubstituted hydrocarbons having from 10 to 50 carbon atoms or olefins having from 3 to 24 carbon atoms are used as nonpolar solvent.

Claim 14 (Canceled):

Claim 15 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present as a solvent in said reaction mixture.

Claim 16 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present in said reaction mixture in an amount of from 1 to 98% by weight.

Claim 17 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present in said reaction mixture in an amount of from 5 to 70% by weight.

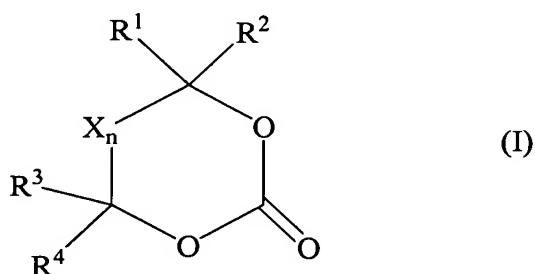
Claim 18 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present in said reaction mixture in an amount of from 5 to 50% by weight.

Claim 19 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present in said reaction mixture in an amount of at least 5 % by weight.

Claim 20 (Previously Presented): The process as claimed in claim 1, wherein said cyclic carbonic ester is present in said reaction mixture in an amount of from 5 to 98% by weight.

Claim 21 (New): A process for the catalytic hydroformylation of an olefinically unsaturated compound having from 3 to 24 carbon atoms using an unmodified catalyst comprising at least one metal of groups 8 to 10 of the Periodic Table of the Elements, except cobalt,

wherein the hydroformylation is carried out in the presence of a cyclic carbonic ester of the formula I



where

R^1, R^2, R^3, R^4 are identical or different and are each H or a substituted or unsubstituted aliphatic, alicyclic, aromatic, aliphatic-alicyclic, aliphatic-aromatic or alicyclic-aromatic hydrocarbon radical having from 1 to 27 carbon atoms,

n is 0 - 5

X is a divalent substituted or unsubstituted, aliphatic, alicyclic, aromatic, aliphatic-alicyclic or aliphatic-aromatic hydrocarbon radical having from 1 to 27 carbon atoms,

with the proportion of the carbonic ester being at least 1% by weight of the reaction mixture.

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Reply to the Office Action dated: March 20, 2006

BASIS FOR THE AMENDMENT

Claim 14 has been canceled.

Claim 1 has been amended as supported, for example, at page 11 of the specification and Claim 14.

New Claim 21 has been added as supported by Claim 1 and at page 1, lines 19-21.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-13 and 15-21 will now be active in this application.